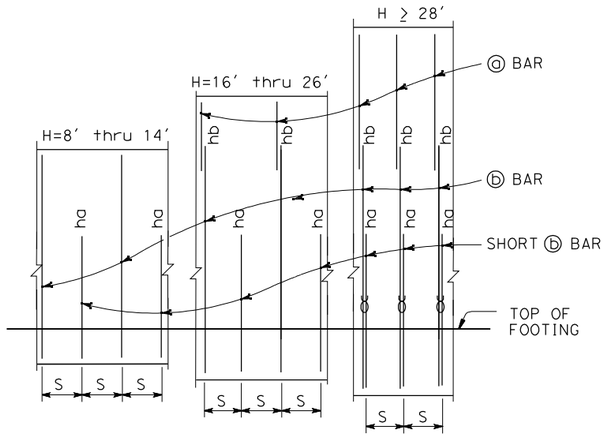
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

REGISTERED CIVIL ENGINEER — DATE X

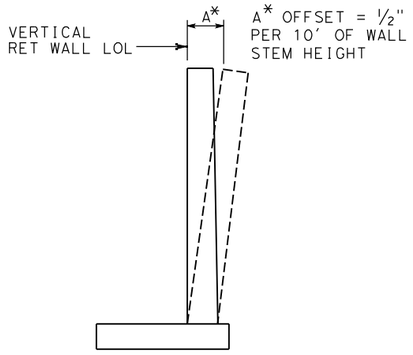
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. X — Exp. X — CIVIL — STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



ELEVATION
No Scale



WALL OFFSET
No Scale

Values for offsetting forms to be determined by the Engineer.

NOTES:
"ha", "hb" above ⓑ bars indicate distance from top of footing to upper end of ⓑ bars, see table.
"S" is ⓑ bar spacing, see table.

DESIGN DATA

Design: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments

WS: 33 psf on Sound wall and Barrier

LS: Varied surcharge on level ground surface

CT: 54 kip maximum traffic impact loading evenly distributed over 10 feet at top of the barrier and 1:1 distribution down and outward

EQE: Mononabe-Okabe Method
K_h = 0.3
K_v = 0.0

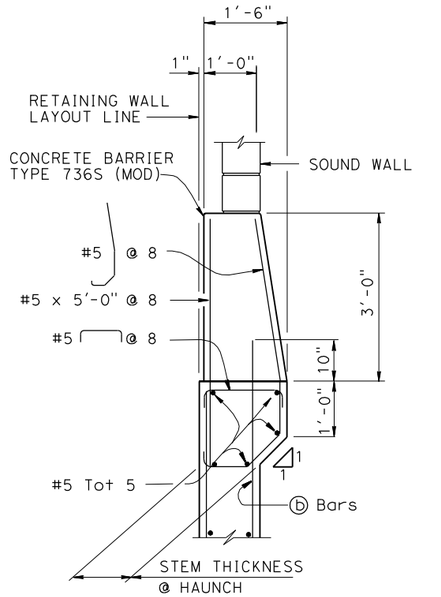
Soil: Ø = 34°
γ = 120 pcf

Reinforced Concrete: f'c = 3600 psi
fy = 60,000 psi

Load Combinations and Limit States

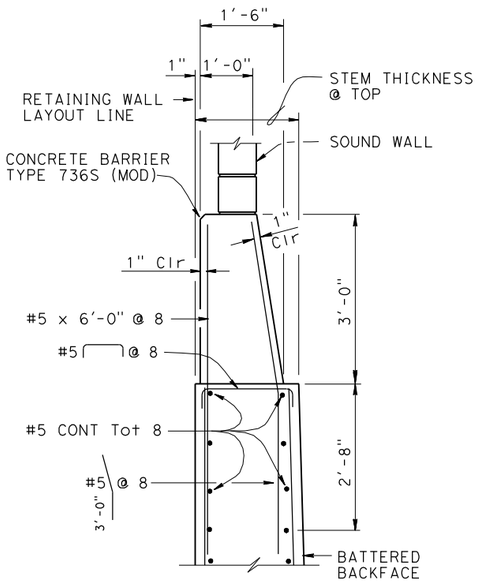
Service I	Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS+Td
Service II	Q=1.00DC+1.00EV+1.00EH+1.00WS+Td
Strength I	Q=αDC+βEV+1.50EH+1.75LS+Td
Strength III	Q=αDC+βEV+1.50EH+1.40WS+Td
Strength V	Q=αDC+βEV+1.50EH+1.35LS+0.40WS+Td
Extreme I	Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE+Td
Extreme II	Q=1.00DC+1.00EV+1.00EH+1.00CT+Td

Where:
Q: Force Effects
α: 1.25 or 0.90, Which ever Controls Design
β: 1.35 or 1.00, which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design
WS: Wind Load on Sound wall and Barrier
CT: Vehicular Collision Force
Td: Anchor Design Load



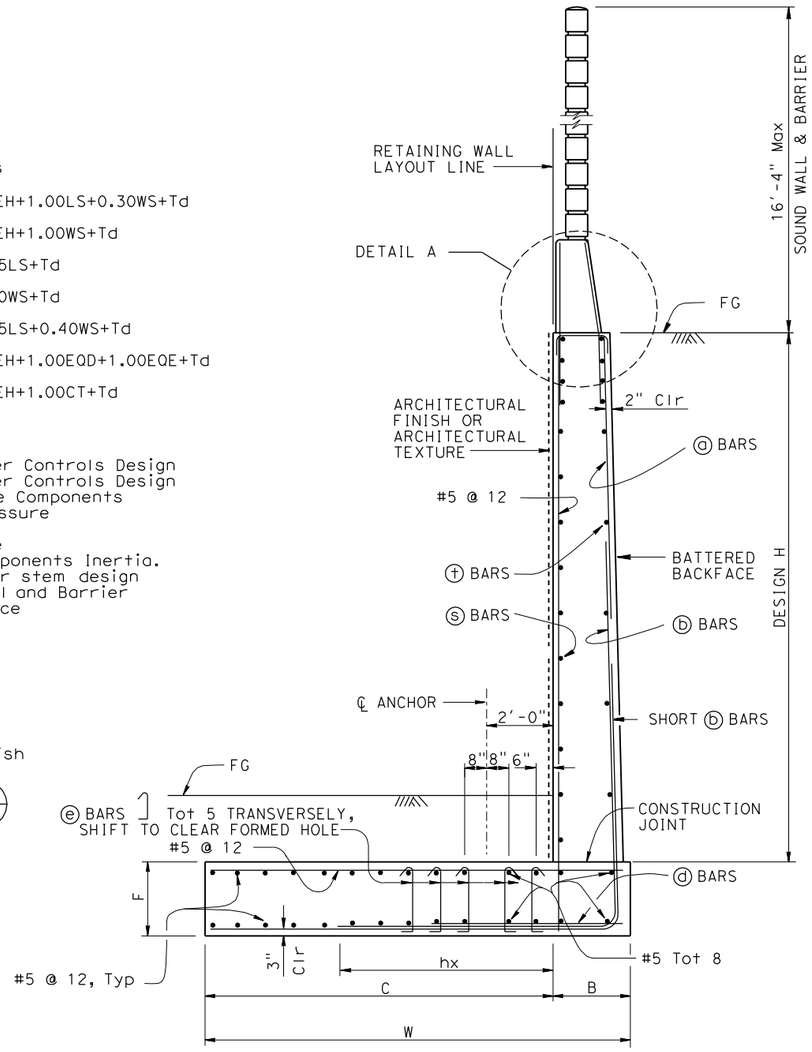
DETAIL A - WITH HAUNCH
No Scale

For Details not shown, see "DETAIL A - WITHOUT HAUNCH"



DETAIL A - WITHOUT HAUNCH
No Scale

NOTES:
1. For Sound wall and Retaining wall Architectural finish or texture see Details elsewhere in Project Plans
2. For Details not shown and Drainage Notes see 3-5
3. Footing cover, 2'-0" minimum.
4. For Sound wall and barrier reinforcement details, see "SOUND WALL - MASONRY BLOCK WITH BARRIER ON RETAINING WALL" sheet.
5. For H=6' through 14', extend ⓑ bars into Barrier for stem with haunch.
6. Shift ⓑ bars and ⓓ bars as required to clear formed hole for ground anchor.
7. Footing is designed to resist 1.33 Td assuming the maximum anchor spacing shown in the table.



SPREAD FOOTING SECTION
No Scale

STANDARD DRAWING					
FILE NO. xs14-390-1	APPROVAL DATE July 2011	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. X / POST MILE X	X RETAINING WALL TYPE 7SWB - DETAILS NO.1

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: X
PROJECT NUMBER & PHASE: X
CONTRACT NO.: X

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
				X	X

FILE => $REQUEST

USERNAME => $USER DATE PLOTTED => $DATE TIME PLOTTED => $TIME